0022-3018/85/1732-0103$02.00/0
THE JOURNAL OF NERVOUS AND MENTAL DISEASE
Vol. 173, No. 2
Printed in U.S.A.
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Success and Failure at Outpatient Opioid Detoxification

Evaluating the Process of Clonidine- and Methadone-Assisted Withdrawal

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Two controlled trials have suggested that clonidine can be used on an outpatient basis to assist in opioid withdrawal, but that rates of successful detoxification do not exceed those obtained with gradual methadone reduction. This study examines the process of clonidine- and methadone-assisted detoxification to provide information about the timing and severity of withdrawal symptoms and side effects associated with each of the two methods. Derived from a double-blind clinical trial with randomized treatment assignment, data are presented which might guide the clinician in the choice of detoxification methods. In this study, subjects in either treatment condition had a success rate of approximately 40% and most subjects experienced at least moderate withdrawal discomfort in the areas of difficulty sleeping, feeling "blah," and craving. In both treatment groups the best predictor of detoxification failure was a high level of psychological symptoms at the onset of the study. Compared with gradual methadone reduction, clonidine treatment resulted in higher levels of withdrawal symptoms and side effects, earlier onset of withdrawal discomfort, earlier attrition, earlier termination of withdrawal discomfort, and a posttreatment course of drug use that was more consistent with success status during the study treatment.

Numerous studies have indicated that clonidine, an alpha adrenergic agonist, is a useful agent for blocking many symptoms of opioid withdrawal, and inpatient withdrawal procedures have been successful with 80% or more of those who undertake the process (1, 4, 6, 13). Clonidine-assisted detoxification on an outpatient basis has been less frequently studied (7, 15, 16) and the results have been less promising. In an open, uncontrolled trial with 70 patients, Washton and Resnick (16) reported that 50% of opiate addicts were able to complete detoxification, when clonidine was used to assist in gradual withdrawal from methadone, whereas 70% succeeded when opiates were abruptly withdrawn and clients were treated with clonidine. In a double-blind outpatient study with 26 subjects, Washton and Resnick (16) found that outpatient detoxification was successful with only 31% of patients using clonidine compared with 45% success rate using gradual withdrawal from methadone, and the difference was not statistically different. In a larger double-blind outpatient study by Kleber and associates (8), success rates for outpatient detoxification were also found to be lower than those achieved in inpatient clonidine studies and equivalent in groups treated with clonidine (42%) or methadone (39%).

Although previous reports have suggested an equivalence in the overall outcome of outpatient detoxification with clonidine and methadone, the similarity in success rates may obscure important differences in the two methods in the *process* of detoxification. If the clinician is to choose between two detoxification methods with comparable efficacy, the choice may be guided by other factors such as types of possible side effects or time course of the procedures. In this paper we compare the course of outpatient withdrawal from opiates in four groups: successes and failures at clonidine-assisted withdrawal, and successes and failures at methadone-assisted withdrawal. By comparing pretreatment characteristics, detoxification experience, and follow-up behavior of these four groups, we attempt to determine the factors that contribute to the success of outpatient detoxification in general and of these two treatments in particular.

Methods

Subjects

The subjects for this study were opiate-addicted individuals who had been addicted to opiates for at least 6 months and had been receiving methadone for a least 6 weeks before the study. All subjects were informed of the research procedures and gave their written consent before taking part. At the onset of the study, all subjects had been receiving a methadone

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Support for this work was provided by Grant R01-DA03090-01 and Research Scientist Development Award K02 DA00089-01 to B. J. R. from the National Institute on Drug Abuse.

dose of 20 mg daily for 2 weeks. This usually necessitated a period of dosage reduction because the average maintenance dose in this clinic is more than 40 mg. Only subjects who were comfortable on the initial dose of methadone were entered into detoxification. There were no exclusionary criteria on the basis of sex or race. Age range was required to be between 21 and 50. Exclusionary criteria included a) the current use of monoamine oxidase inhibitors, neuroleptics, sedative-hypnotics, and other antihypertensive drugs except diuretics, and use of narcotics other than methadone within 2 weeks of beginning the study; b) current alcohol abuse; c) allergy to imidazolidine drugs by history; d) pregnancy; and e) any medical or psychiatric illness that, in the judgment of the investigator, would subject the patient to unnecessary risk or compromise the objective evaluation of the investigative drug. Medical illnesses excluded were chronic or acute cardiac disorders (severe sinus bradycardia, arrhythmias, or history of rheumatic fever), renal or metabolic diseases, and moderate to severe hypertension. Psychiatric illnesses that were excluded were schizophrenia or severe affective disorders (5). A physical examination and appropriate routine medical evaluation were performed within one week of the start of the study. The only additional medication permitted during the study was chloral hydrate, .5 to 1 gram, for insomnia.

Pharmacotherapy Conditions

Subjects were randomly assigned to be treated in one of two groups over a 30-day period: a) the methadone group, or b) the clonidine group. Both groups received a liquid and tablets every day. Tablets containing clonidine or placebo were taken at 11:00 a.m., 5:00 p.m., and 11:00 p.m. Liquid consisting of methadone or methadone placebo was administered at the clinic at 5:00 p.m. The methadone group started at 20 mg of methadone, which was decreased by 1 mg every day, resulting in the last dose being given on day 20. For the next 10 days they received a methadone placebo. During the whole study they received clonidine placebo tablets. The clonidine group also started at 20 mg of methadone, but were abruptly switched to clonidine with complete discontinuation of methadone. The clonidine was dispensed in the form of .1-mg tablets taken three times daily. The usual total daily dose was as follows: day 1, .3 mg; day 2, .4 to .6 mg; day 3, .4 to .7 mg; day 4, .5 to .8 mg; day 6 on, .6 to 1.0 mg. A total dose of up to 1 mg was given depending on the amount needed to control withdrawal symptoms and the effect on blood pressure until day 10. Between days 11 and 15 clonidine was reduced daily by approximately 20 to 25% of the total dose received on day 10. The patient then received clonidine placebo tablets from day 16 to day 30 and received methadone placebo liquid throughout the study.

In both cells, Monday through Saturday the patient took the 4:00 p.m. dose in the clinic and the 11:00 a.m. and the bedtime dose at home. The patient was not required to come to the clinic on Sunday. Whenever possible, a family member or other trusted significant person was identified to assist the investigator and staff by helping the patient take the appropriate study medications at the scheduled times. Patients remained in the clinic for 4 hours on the first, 11th, and last day of the study, at which times blood pressure was monitored and study ratings were performed.

In both cells, each patient was seen by a nurse who was blind to the treatment condition, who administered a withdrawal rating scale, took vital signs except for the blood pressure, and provided counseling to the patient. The patient was also seen by a physician who was blind to the treatment condition, who provided psychological support and gave recommendations as to the need for ancillary medications such as for sleep. The patient was then seen by a nurse who was open to the treatment condition and took blood pressure. The data from all three of these examiners were relayed to a physician who was open to the treatment condition, who determined the dose of medication to be used that day as well as any other ancillary medication.

Any subject who requested a discontinuation of the detoxification schedule after 1 full day of therapy or a hold in dose for more than 1 day was considered a detoxification failure. Patients who missed more than 2 consecutive days of medication during the first 20 days of the study were dropped and considered failures.

Ratings

Withdrawal symptoms. Ratings of withdrawal symptoms and side effects were made on a daily basis. To rate withdrawal symptoms two methods were used: a) a questionnnaire, completed by the nurse who was blind to the treatment condition, consisting of 25 severity ratings ranging from 0 to 3 with a scale range of 0 to 72; and b) a subject self-rated withdrawal scale consisting or 32 severity items rating on a 1 to 4 scale with a scale range of 32 to 128. These measures were drawn from the Addiction Research Center Inventory (7). As described elsewhere, the agreement between clinician ratings and self-reported ratings was good (9).

Psychological symptoms. The Symptom Checklist 90 (SCL-90) (3) is a self-report rating scale oriented toward the symptomatic behavior of psychiatric outpatients. It is derived from the Hopkins Symptom Checklist. It is composed of 90 items rated on a 5-

point scale. The items reflect nine primary symptom dimensions that are believed to underlie the majority of symptom behaviors observed in these patients: 1) somatization, 2) obsessive-compulsivity, 3) interpersonal sensitivity, 4) depression, 5) anxiety, 6) hostility, 7) phobic anxiety, 8) paranoid ideation, and 9) psychoticism.

Results

Attrition/Success in Clonidine and Methadone Conditions

Forty-nine patients entered the study, of whom 25 were randomly assigned to methadone treatment condition and 24 to clonidine. From the methadone group, two subjects were dropped because they left the study for reasons unrelated to medication: one moved out of state on day 16 and another was involved as a passenger in an automobile accident and required narcotic treatment for painful injuries.

Successful detoxification, the main outcome sought in this treatment study, was defined as a) having 10 days following the last dose of study methadone in which no illicit opiate use is reported, or b) passing a naloxone test (14) on completion of the study.

The success rates and naloxone challenge rates were not significantly different in the two groups. In the clonidine group 10/24 (42%) of the subjects were found to be successes, with 6/10 (62%) of the successes taking the naloxone challenge. In the methadone group 9/23 (39%) of the patients were considered successful, of whom 6/9 (67%) took the naloxone challenge. For a more complete presentation of principal study findings see Kleber *et al.* (8).

Comparison of Successes and Failures in Clonidine and Methadone Detoxification

Pretreatment characteristics. As shown in Table 1, age, sex, and length of opiate use were not significantly different in clonidine and methadone groups or in successes and failures. The clonidine group was different from the methadone group because it had a higher proportion of whites. Successes were distinguished from failures by having lower symptom levels as measured by the SCL-90. The differences were significant in six of nine subscales, with greatest differences in anxiety, depression, and obsessive compulsivity.

Course of symptoms/attrition. Figure 1 displays the attrition pattern in the four groups, indicating a marked difference in the pattern of dropout in the clonidine and methadone treatment conditions. Not surprisingly, most succeeders completed the study and the only ones who did not were those subjects who elected to take the naloxone challenge early. Only three methadone and one clonidine failure completed the 30-day detoxification program. However, the clonidine failures typically dropped out of treatment during the first week of the study, whereas the methadone failures tended to stay in the study until the third week. The patterns of dropout for the clonidine *vs.* methadone failures were found to be significantly different when survival curve analysis was used (Wilcoxon statistic = 8.7, $p < .003$) (2). This relates to underlying differences in the withdrawal procedures, because the clonidine group received no further methadone after day 1, whereas the methadone group continued to receive decreasing doses of methadone until day 20.

Figure 2 suggests the pattern of withdrawal discomfort experienced by the four groups. In this graph, the five time points indicate average withdrawal ratings before the start of the study and for each of the 4 weeks of the study. Although the four groups were not significantly different at the onset of the study ($F[3,44] = 1.3, p = \text{NS}$), the clonidine group of failures experienced only relatively mild discomfort from the start and these levels gradually decreased over time. Both methadone groups experienced little withdrawal discomfort during the first 2 weeks of the study, and the methadone failure group experienced earlier discomfort than the methadone successes. Group means were compared each week by an analysis of covariance, co-varying for initial symptoms levels. As shown in Figure 2, at weeks 1, 2, and 3 significant differences were detected. Thus, when clonidine is used to block withdrawal symptoms after abrupt opiate withdrawal, it is quickly apparent whether or not the subjects will experience intolerable side effects or withdrawal symptoms. In contrast, with the gradual methadone withdrawal, subjects who will fail at treatment begin to experience intolerable withdrawal symptoms only after the dose begins to drop below 10 mg.

Withdrawal phase symptoms and side effects. Table 2 displays characteristics of withdrawal symptoms experienced by the four groups. As displayed there, subjects treated with the clonidine method experienced a higher self-rated level of maximum withdrawal symptoms, a higher percentage of days in treatment in which self-rated withdrawal symptoms were high, and an earlier emergence of high self- and nurse-rated withdrawal symptoms and craving. There were also differences in these characteristics according to success and failure in treatment. Successes had lower maximum self-rated withdrawal symptoms and a later onset of craving. There were no significant interactions in these characteristics of the withdrawal experience between treatment group and success status.

In Table 3, maximum *nurse-rated* side effects and withdrawal symptoms are listed for the four groups. As shown there, differences in individual side effects

TABLE 1

Characteristics of Opiate Addicts before Undergoing Outpatient Detoxification

	Treatment Group								Significance of Two-Way Analysis of Variance or χ^2		
	Clonidine				Methadone						
	Success		Failure		Success		Failure		Treatment	Success	Interaction
	N	$\bar{X}$ or %	*N*	$\bar{X}$ or %	*N*	$\bar{X}$ or %	*N*	$\bar{X}$ or %			
Race											
White	8		12		6		7		*		
Nonwhite	2		2		3		7				
Sex											
Male	9		9		7		10				
Female	1		5		2		4				
Age	10	28.7	14	29.0	9	32.3	14	26.8			
Yrs on opiates	10	7.6	14	9.4	9	10.2	14	8.4			
Psychological symptoms (SCL-90 subscales [range 0–43])	8		13		9		14				
Hostility		7.6		9.2		7.0		9.6		*	
Anxiety		12.4		15.5		11.1		16.9		**	
Depression		16.3		22.3		16.8		25.5		**	
Interpersonal sensitivity		11.8		14.5		10.3		15.6		*	
Obsessive compulsivity		13.6		20.1		12.6		18.1		**	
Paranoia		7.8		7.8		6.3		9.1			
Phobia		7.6		8.2		7.0		9.5			
Psychoticism		18.0		20.5		18.1		20.6			
Somatization		16.6		24.2		16.2		19.9		*	
Total (range 0–360)		123.9		156.3		116.4		158.1		**	

$^*p < .05$; $^{**}p < .01$.

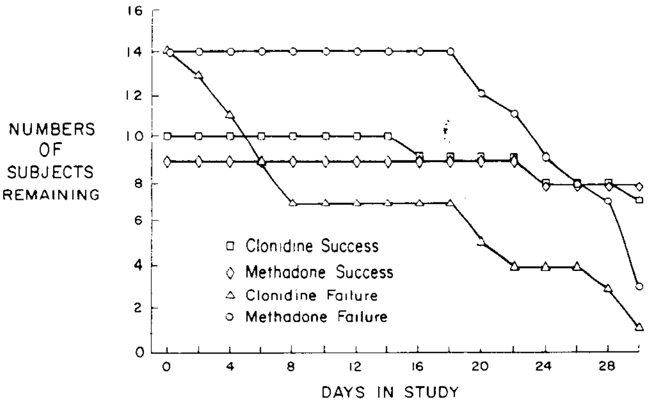

FIG. 1. Attrition in outpatient opioid detoxification with clonidine and methadone.

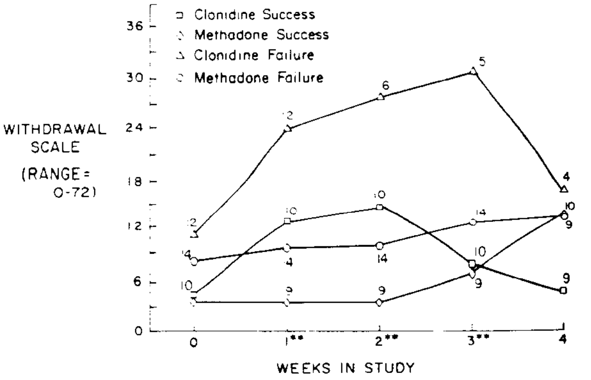

FIG. 2. Withdrawal symptom ratings during outpatient opioid detoxification. Numbers refer to cell size at each rating time. **Significance for analysis of covariance, $p < .01$.

and symptoms were most frequently noted across treatment groups, with the clonidine group experiencing higher levels of appetite loss, low energy, muscle pains, drowsiness, yawning, dry mouth, and sneezing. Successes were rated as having fewer occurrences of chills and dry mouth. For the majority of symptoms there were no differences among the four groups. It is noteworthy that several features of the withdrawal experience seemed to be universal regardless of success and treatment status including difficulty sleeping, feeling "blah," and craving. As presented elsewhere (7), it is noteworthy that there were no differences in the two treatment conditions in scores of subjects' blood pressure.

Opiate use following completion of the study. Following completion of the study, follow-up information was obtained in face-to-face interviews 1, 3, and 6 months later. The number of subjects evaluated at each rating was as follows: 1 month, clonidine = 15, methadone = 18; 3 months, clonidine = 15, methadone = 19; 6 months, clonidine = 13, methadone = 18. At each point illicit opiate, cocaine, and alcohol use and treatment utilization were assessed, using a 7-point scale ranging from 1 = no use to 7 = several times daily.

A comparison of posttreatment illicit opiate use in the four groups is displayed in Table 4. In both clon-

TABLE 2

Comparison of Withdrawal Characteristics of Successes and Failures in Clonidine and Methadone Outpatient Detoxification

	Treatment Group								Significance of Two-Way Analysis of Variance		
	Clonidine				Methadone				Treatment group	Success	Intervention group × success
	Success		Failure		Success		Failure				
	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$	N	$\bar{X}$			
Maximum ratings on nurse's withdrawal scale	10	28.9	12^a	47.3	9	28.3	14	29.6			
Maximum ratings on client's withdrawal	9	81.9	13	99.8	9	77.4	14	79.6	*	*	
% Days nurse's ratings high	10	25.6	12^a	62.2	9	17.8	14	30.5		*	
% Days client's ratings high	9^a	27	13	65.8	9	9.9	14	24.3	**	**	
% Days craving	10	20.9	12^a	47.6	9	19.4	14	27.1			
First day of client's maximal withdrawal rating	9^a	5.1	13	5.6	9	14.1	14	11.6	***	NS	NS
First day of nurse's maximal withdrawal rating	10	6.4	12^a	6.3	9	18.7	14	16.1	****	NS	NS
First day of craving	8^b	12.1	10^b	3.1	9	20.0	12	20.0	**	**	NS

[a] Missing data.

[b] Two subjects in clonidine failure group and two in clonidine success group *never* reported craving.

*$p < .05$; **$p < .01$; ***$p < .001$; ****$p < .0001$.

TABLE 3

Side Effects and Withdrawal Symptoms Experienced by Opiate Addicts

Maximum Level of Symptoms and Side Effects (Range = 0-3)	Clonidine		Methadone		Significance of Two-Way Analysis of Variance		
	Success ($N = 10$) $\bar{X}$	Failure ($N = 12$) $\bar{X}$	Success ($N = 9$) $\bar{X}$	Failure ($N = 14$) $\bar{X}$	Treatment group	Success	Interaction group × success
Low energy	2.6	2.6	1.3	2.1	***		
Muscle pains	1.5	2.6	1.8	1.1	*		**
Drowsiness	1.9	2.1	1.0	1.1	***		
Yawning	2.2	2.4	1.8	1.6	*		
Dry mouth	2.3	2.7	1.0	1.9	****	*	
Sneezing	2.2	1.8	1.4	1.3	*		
Chills	1.3	2.1	1.2	1.9		*	
Nervousness	2.4	2.6	2.0	2.1			
Irritability	2.0	2.5	1.3	2.0			
Sweating	2.0	2.4	1.8	2.0			
Difficulty sleeping	3.0	2.5	2.4	2.5			
Hot flashes	1.4	1.6	1.3	1.6			
Stomach cramps	1.4	1.9	1.8	1.9			
Nausea	.8	1.6	1.3	1.1			
Vomiting	.8	1.2	.7	.5			
Feeling blah	2.2	2.5	1.9	2.3			
Diarrhea	1.1	.9	1.6	1.1			
Joint pain	1.7	2.4	1.8	1.8			
Tremors	.5	1.3	.7	.8			
Running nose	1.5	2.1	1.7	1.6			
Teary	1.3	1.6	1.4	1.8			
Craving	2.0	2.4	2.7	2.0			
Palpitations	.9	1.0	.4	.9			
Kicking	2.0	1.9	2.0	1.9			

*$p < .05$; **$p < .01$; ***$p < .001$; ****$p < .0001$.

TABLE 4

Follow-up Course of Successes and Failures at Opiate Detoxification

	Treatment Group				Significance of χ^2	
	Clonidine		Methadone		Success	Group
	Success	Failure	Success	Failure		
1 Mo						
No regular illicit opiate use (less than once weekly)	4	2	3	5	NS	NS
Regular illicit opiate use (weekly or more frequently)	2	7	4	6		
3 Mos						
No regular illicit opiate use (less than once weekly)	7	0	4	5	$p < .01$	NS
Regular illicit opiate use (weekly or more frequently)	0	8	3	6		
6 Mos						
No regular illicit opiate use (less than once weekly)	6	2	4	7	NS	NS
Regular illicit opiate use (weekly or more frequently)	1	4	3	4		

idine and methadone groups, less than one half of the subjects had avoided relapse to regular illicit opiate use at the 1- and 3-month follow-up evaluations. However, at the 6-month evaluation, over 60% of both clonidine and methadone groups were free of regular illicit opiate use, but nearly one third of these (data not shown) were free of illicit opiate use because they had returned to methadone maintenance. Although the overall follow-up abstinence rates were comparable in the methadone and clonidine groups, the pattern related to success and failure during the 30-day detoxification period is different in the two groups. In the clonidine group, those who succeeded during the detoxification period tended to maintain their abstinence, whereas those who failed tended to resume illicit opiate use. In contrast, there was little relationship between success and failure at methadone detoxification and subsequent abstinence or relapse, with just as many treatment "failures" eventually stopping regular opiate use during the 6-month follow-up period.

Prediction of Success

To evaluate the relative importance in this study of predisposing factors as compared with treatment experience factors, a stepwise multiple regression equation was constructed entering in the pretreatment variable that most discriminated the groups, the SCL-90 mean, and two treatment process variables, the maximum client's withdrawal scale mean and the treatment group (clonidine, methadone). The outcome measure was success or failure in treatment. In this analysis only the SCL-90 mean was entered into the equation and it accounted for 14.9% of the variance. Thus, although the outcome of detoxification was not highly predictable on the basis of either pretreatment or during-treatment factors (10), initial psychological symptom level was in this study the most powerful predictor of success.

Discussion

Features of Outpatient Opiate Withdrawal with Either Method

This study suggests that outpatient detoxification from methadone using either clonidine or gradual dose reduction is a complex and difficult process for many clients. Only approximately 40% of those entering treatment successfully completed the 30-day detoxification program using either regimen. Less than one half of the subjects were able to maintain abstinence from regular illicit opiate use during the 6-month period following completion of the detoxification phase, and there were relapses among those whose initial detoxification appeared to be successful and later abstinence among those whose initial attempts at detoxification were unsuccessful.

During the detoxification phase, very few subjects experienced no symptoms or medication side effects, and most subjects experienced difficulty sleeping, feeling "blah," and craving at a moderate to severe level on at least one occasion. Thus, it is important for clinicians to be aware that addicts with even the smoothest expectable withdrawal course will not be entirely symptom free and that addicts should be informed of this before undergoing detoxification. Moreover, the variable course of maintained abstinence in the 6 months following initial detoxification suggests the value of continued care during this time.

Characteristics of Clonidine-Assisted Outpatient Withdrawal

Following abrupt withdrawal of methadone and the initiation of clonidine treatment, subjects who were likely to fail at this method typically experienced unacceptable side effects and withdrawal symptoms within the first week. In working with patients receiving clonidine, clinicians perceived a bimodal pattern such that the clonidine was "holding" the patient or it was not. Overall, subjects in the clonidine cell had more severe withdrawal symptoms and side effects than those in the methadone cell, with heavier drowsiness, lower energy level, more yawning, more dry mouth, more sneezing, greater appetite loss, and more severe muscle pain than those in the methadone cell. However, for successes, the overall symptom levels were not high and receded substantially after 2 weeks in the study. In keeping with the initial bimodal nature of the clonidine's being effective or not, the follow-up course of addicts in this cell was likely to involve continued maintenance of either initial success or initial failure. The clonidine successes were likely to make comments like, "This is the easiest time I've ever kicked," while failing subjects were frequently disillusioned with the treatment and thought themselves to be unprepared for the severe withdrawal symptoms experienced during the first 2 weeks of the detoxification program.

Given the relatively early contrast between clonidine successes and failures, it may be advisable for clinicians to halt the detoxification process after 1 week for subjects who do not appear to be able to tolerate the procedure. Methadone could then be resumed at a lower dose and an alternative detoxification plan could be initiated. In addition, a major issue in the current study may have been the double-blind nature of the treatment such that subjects could not be fully prepared for the procedure that they were to undertake. If both subject and clinician were aware that he/she could anticipate a difficult 7- to 14-day period followed by comparative comfort, then the clients may have been able to persevere. In fact, with an open clonidine-assisted outpatient procedure similar to the one in this study, Washton and Resnick (15) achieved a 70% success rate, which suggests that both clinicians and subjects were better able to anticipate and manage problems that arose in the withdrawal process.

Characteristics of Outpatient 30-Day Methadone Withdrawal

In the current study, it was impressive that subjects in the gradual methadone withdrawal condition did not typically experience severe withdrawal symptoms until the dosage reached 10 mg or less. The level of withdrawal symptoms for both successful and failing clients tended to rise during the subsequent 2 weeks of study and the symptom levels did not appear to be decreasing by the end of the 30-day withdrawal phase. Thus, continuing the detoxification phase to only 10 days beyond the last dose of methadone may be insufficient for many subjects, and adding 2 to 3 weeks of follow-up counseling may have been appropriate. The presence of continued withdrawal symptoms following the completion of the 30-day detoxification phase may explain the number of subjects who were initially successful but were unable to maintain their abstinence from illicit opiates during the subsequent months. When the course of withdrawal symptoms with methadone is compared to that with clonidine, it is apparent that the methadone withdrawal process is more protracted, but that there are not sedative clonidine side effects and lessened degrees of several withdrawal symptoms. In choosing between methods, the clinician can opt for clonidine, which is variable in symptom level but is comparatively brief, or tapering with methadone, which has lower symptoms levels but is comparatively lengthy.

The finding that methadone subjects did not experience substantial withdrawal symptoms until relatively low doses were reached has led this group to design a study in which clonidine-assisted detoxification is attempted with subjects who have first experienced a gradual reduction of methadone dose to 10 mg per day. In the current study, there were no dropouts from the methadone group during the first 10 days and few changes in initial levels of withdrawal symptoms. By commencing the clonidine-assisted detoxification at a lower dose of methadone, we hope to use a lower dose of clonidine. This lower dose may be more successful at blocking withdrawal symptoms and produce less severe sedative side effects.

Prediction of Success at Outpatient Detoxification

A noteworthy aspect of the current study is that success or failure at outpatient detoxification appears to have been more a function of the client's psychological symptom state at the onset of the study than of subsequent levels of withdrawal symptoms and side effects. Although detoxification methods such as the use of clonidine are aimed at reduction of opiate withdrawal symptoms, the addict's ability to withstand the discomfort of withdrawal or even his sensitivity to the symptoms may be importantly affected by his psychological state when the detoxification process is begun. If he is depressed, anxious, or otherwise dysphoric, he may either attend to withdrawal stresses more readily or be less able to sustain a sufficient sense of hopefulness that would allow him to resist the urge to resume opiate use. Other studies have shown that severity of psychiatric problems in general (11) or of depression specifically (12) are importantly related to poorer treatment outcome among substantive abusers. The current study suggests that these findings may be partially accounted for by difficulty that dysphoric individuals have in undergoing detoxification. Past work with rapid clonidine-assisted withdrawal from opiates has suggested that addicts with a history of major affective disturbance may be vulnerable to development of severe depression following detoxification (5). For that reason, such individuals were excluded from this study. However, the current findings suggest that even those with current dysphoria of mild to moderate severity may have impaired ability to succeed at withdrawing from opiates as outpatients.

This and the previous studies suggest the value of detecting those substance abusers with high levels of psychological symptomatology and modifying the treatment approach to minimize the negative impact of psychological symptoms. In the case of outpatient detoxification, it may be desirable to delay the process until an improvement of psychological state is achieved through psychotherapy or pharmacotherapy or to provide a more flexible response to problems that arise during the detoxification process itself. In the current study, clinicians were guided by research protocol that did not allow them to make such adjustments as extending the detoxification process when necessary, and this may have increased attrition in those who were experiencing difficulty.

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